

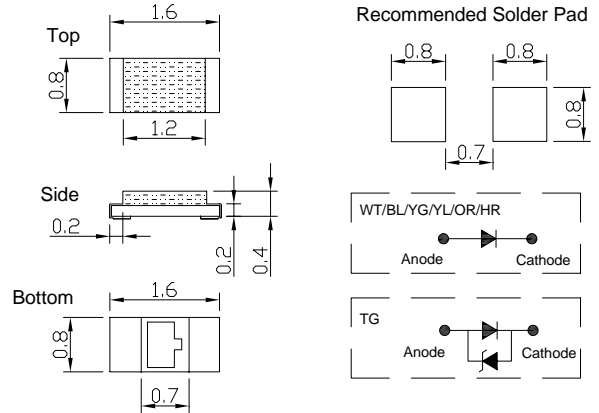
■Features

- Single chip
- Super high brightness of surface mount LED
- Sorting for I_v and V_f @ 5mA of I_f
- Compact package outline
(LxWxT) of 1.6mm x 0.8mm x 0.4mm
- Compatible to IR reflow soldering.

■Applications

- Backlighting (switches, keys, etc.)
- Marker lights (e.g. steps, exit ways, etc.)

■Outline Dimension



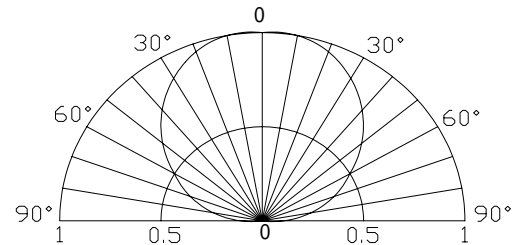
■Absolute Maximum Rating

($T_a=25$)

Item	Symbol	Value	Unit
		WT	
DC Forward Current	I_F	30	mA
Pulse Forward Current*	I_{FP}	108	mA
Reverse Voltage	V_R	5	V
Power Dissipation	P_D	100	mW
Operating Temperature	T_{opr}	-40 ~ +85	
Storage Temperature	T_{stg}	-40 ~ +85	
Lead Soldering Temperature	T_{sol}	260 /5sec	-

*Pulse width Max 0.1ms, Duty ratio max 1/10

■Directivity



Electrical -Optical Characteristics

($T_a=25$)

Part Number	Color		V_F (V)			I_R (μ A)	I_v (mcd)			λ_D (nm)			2 θ 1/2(deg)
			Min.	Typ.	Max.	Max.	Min.	Typ.	Max.	Min.	Typ.	Max.	Typ.
			$I_F=5mA$			$V_R=5V$	$I_F=5mA$						
OSWT0603C1A	White	WT	2.7	2.9	3.2	100	37	74	110	X=0.27, Y=0.28			120

Note: * V_f tolerance: $\pm 0.05V$ * True Green $V_R=4V$

* Dominant wavelength tolerance: $\pm 1nm$

* Luminous intensity is NIST reading. Luminous intensity tolerance: $\pm 10\%$

Group Definition of forward voltage (@5mA)

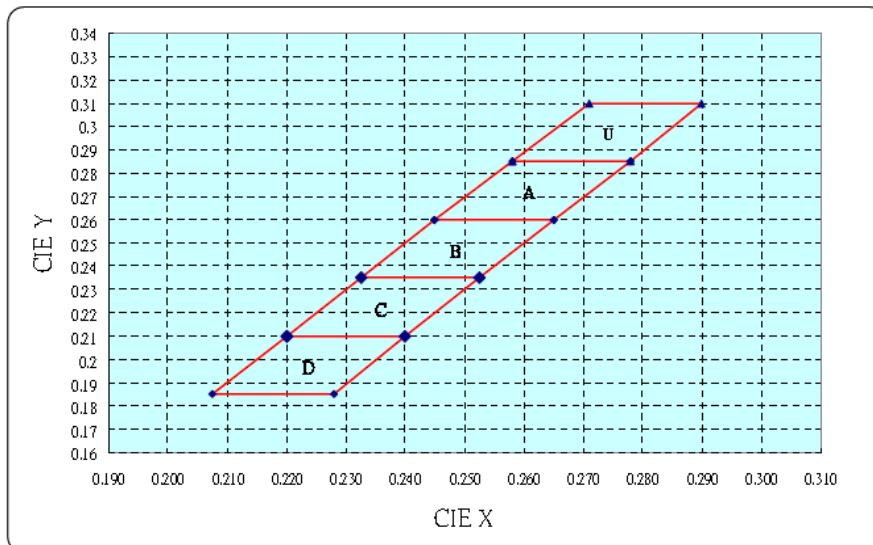
Rank	Vf (V)
1	2.7 ~ 2.8
2	2.8 ~ 2.9
3	2.9 ~ 3.0
4	3.0 ~ 3.1
5	3.1 ~ 3.2

Group Definition of Brightness(@5mA)

Rank	Iv (mcd)
A	37 ~ 47
B	47 ~ 60
C	60 ~ 75
D	75 ~ 90
E	90 ~ 110

Group Definition of CIE value

If color binning is required ,only one color group is allowed for each chip within a reel



Chromaticity coordinate groups are measured with an accuracy of ± 0.01

Rank	A			
X	0.258	0.245	0.265	0.278
Y	0.285	0.260	0.260	0.285

Rank	U			
X	0.271	0.258	0.278	0.290
Y	0.310	0.285	0.285	0.310

Rank	B			
X	0.245	0.2325	0.2525	0.265
Y	0.260	0.235	0.235	0.260

Rank	D			
X	0.22	0.2075	0.228	0.24
Y	0.21	0.185	0.185	0.21

Rank	C			
X	0.2325	0.220	0.240	0.2525
Y	0.235	0.210	0.210	0.235

* One delivery would be included 125 different ranks of the luminous intensity , wavelength and Vf depend on customer request.

* The quantity ratio of the different intensity and wavelength ranks in one delivery is decided by Optosupply.

* The reel of LED shows the number of definition of LEDs on reel label